



SEQUENCE LISTING

<110> PEDERSEN, ANDERS H.
ANDERSON, KIM V.
BORNAES, CLAUS

<120> FACTOR VII OR VIIA-LIKE MOLECULES

<130> 31-001100US

<140> 09/782,587

<141> 2001-02-12

<150> PA 2000 00218

<151> 2000-02-11

<150> 60/184,036

<151> 2000-02-22

<150> 60/241,916

<151> 2000-10-18

<160> 19

<170> PatentIn Ver. 2.1

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<213> Homo sapiens

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20 25 30

Asp Ala Xaa Arg Thr Lys Leu Phe Trp Ile Ser Tyr Ser Asp Gly Asp
35 40 45

Gln Cys Ala Ser Ser Pro Cys Gln Asn Gly Gly Ser Cys Lys Asp Gln
50 55 60

Leu Gln Ser Tyr Ile Cys Phe Cys Leu Pro Ala Phe Glu Gly Arg Asn
65 70 75 80

Cys Glu Thr His Lys Asp Asp Gln Leu Ile Cys Val Asn Glu Asn Gly
85 90 95

Gly Cys Glu Gln Tyr Cys Ser Asp His Thr Gly Thr Lys Arg Ser Cys
100 105 110

Arg Cys His Glu Gly Tyr Ser Leu Leu Ala Asp Gly Val Ser Cys Thr
115 120 125

Pro Thr Val Glu Tyr Pro Cys Gly Lys Ile Pro Ile Leu Glu Lys Arg
130 135 140

Asn Ala Ser Lys Pro Gln Gly Arg Ile Val Gly Gly Lys Val Cys Pro
145 150 155 160

Lys Gly Glu Cys Pro Trp Gln Val Leu Leu Leu Val Asn Gly Ala Gln
165 170 175

Leu Cys Gly Gly Thr Leu Ile Asn Thr Ile Trp Val Val Ser Ala Ala
180 185 190

His Cys Phe Asp Lys Ile Lys Asn Trp Arg Asn Leu Ile Ala Val Leu
195 200 205

Gly Glu His Asp Leu Ser Glu His Asp Gly Asp Glu Gln Ser Arg Arg
210 215 220

Val Ala Gln Val Ile Ile Pro Ser Thr Tyr Val Pro Gly Thr Thr Asn
225 230 235 240

His Asp Ile Ala Leu Leu Arg Leu His Gln Pro Val Val Leu Thr Asp
245 250 255

His Val Val Pro Leu Cys Leu Pro Glu Arg Thr Phe Ser Glu Arg Thr
 260 265 270
 Leu Ala Phe Val Arg Phe Ser Leu Val Ser Gly Trp Gly Gln Leu Leu
 275 280 285
 Asp Arg Gly Ala Thr Ala Leu Glu Leu Met Val Leu Asn Val Pro Arg
 290 295 300
 Leu Met Thr Gln Asp Cys Leu Gln Gln Ser Arg Lys Val Gly Asp Ser
 305 310 315 320
 Pro Asn Ile Thr Glu Tyr Met Phe Cys Ala Gly Tyr Ser Asp Gly Ser
 325 330 335
 Lys Asp Ser Cys Lys Gly Asp Ser Gly Gly Pro His Ala Thr His Tyr
 340 345 350
 Arg Gly Thr Trp Tyr Leu Thr Gly Ile Val Ser Trp Gly Gln Gly Cys
 355 360 365
 Ala Thr Val Gly His Phe Gly Val Tyr Thr Arg Val Ser Gln Tyr Ile
 370 375 380
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 385 390 395 400
 Leu Arg Ala Pro Phe Pro
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 <213> Homo sapiens

<220>
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 Ala
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 aat gcc ttt ctg gaa gag ctc cgc cct ggc tcc ctg gaa cgc gaa tgc 165
 Asn Ala Phe Leu Glu Glu Leu Arg Pro Gly Ser Leu Glu Arg Glu Cys
 5 10 15
 aaa gag gaa cag tgc agc ttt gag gaa gcc cgg gag att ttc aaa gac 213
 Lys Glu Glu Gln Cys Ser Phe Glu Glu Ala Arg Glu Ile Phe Lys Asp
 20 25 30
 gct gag cgg acc aaa ctg ttt tgg att agc tat agc gat ggc gat cag 261
 Ala Glu Arg Thr Lys Leu Phe Trp Ile Ser Tyr Ser Asp Gly Asp Gln
 35 40 45

tgc gcc tcc agc cct tgc cag aac ggg ggc tcc tgc aaa gac cag ctg	309
Cys Ala Ser Ser Pro Cys Gln Asn Gly Gly Ser Cys Lys Asp Gln Leu	
50 55 60 65	
cag agc tat atc tgc ttc tgc ctg cct gcc ttt gag ggg cgc aat tgc	357
Gln Ser Tyr Ile Cys Phe Cys Leu Pro Ala Phe Glu Gly Arg Asn Cys	
70 75 80	
gaa acc cat aag gat gac cag ctg att tgc gtc aac gaa aac ggg ggc	405
Glu Thr His Lys Asp Asp Gln Leu Ile Cys Val Asn Glu Asn Gly Gly	
85 90 95	
tgc gag cag tac tgc agc gat cac acg ggc acg aag cgg agc tgc cgc	453
Cys Glu Gln Tyr Cys Ser Asp His Thr Gly Thr Lys Arg Ser Cys Arg	
100 105 110	
tgc cac gaa ggc tat agc ctc ctg gct gac ggg gtg tcc tgc acg ccc	501
Cys His Glu Gly Tyr Ser Leu Leu Ala Asp Gly Val Ser Cys Thr Pro	
115 120 125	
acg gtg gaa tac cct tgc ggg aag att ccc att cta gaa aag cgg aac	549
Thr Val Glu Tyr Pro Cys Gly Lys Ile Pro Ile Leu Glu Lys Arg Asn	
130 135 140 145	
gct agc aaa ccc cag ggc cgg atc gtc ggc ggg aag gtc tgc cct aag	597
Ala Ser Lys Pro Gln Gly Arg Ile Val Gly Gly Lys Val Cys Pro Lys	
150 155 160	
ggg gag tgc ccc tgg cag gtc ctg ctc ctg gtc aac ggg gcc cag ctg	645
Gly Glu Cys Pro Trp Gln Val Leu Leu Leu Val Asn Gly Ala Gln Leu	
165 170 175	
tgc ggc ggg acc ctc atc aat acc att tgg gtc gtg tcc gcc gct cac	693
Cys Gly Gly Thr Leu Ile Asn Thr Ile Trp Val Val Ser Ala Ala His	
180 185 190	
tgc ttc gat aag att aag aat tgg cgg aac ctc atc gct gtg ctc ggc	741
Cys Phe Asp Lys Ile Lys Asn Trp Arg Asn Leu Ile Ala Val Leu Gly	
195 200 205	
gaa cac gat ctg tcc gag cat gac ggg gac gaa cag tcc cgc cgg gtg	789
Glu His Asp Leu Ser Glu His Asp Gly Asp Glu Gln Ser Arg Arg Val	
210 215 220 225	
gct cag gtc atc att ccc tcc acc tat gtg cct ggc acg acc aat cac	837
Ala Gln Val Ile Ile Pro Ser Thr Tyr Val Pro Gly Thr Thr Asn His	
230 235 240	
gat atc gct ctg ctc cgc ctc cac cag ccc gtc gtg ctc acc gat cac	885
Asp Ile Ala Leu Leu Arg Leu His Gln Pro Val Val Leu Thr Asp His	
245 250 255	
gtc gtg cct ctg tgc ctg cct gag cgg acc ttt agc gaa cgc acg ctg	933
Val Val Pro Leu Cys Leu Pro Glu Arg Thr Phe Ser Glu Arg Thr Leu	
260 265 270	

gct ttc gtc cgc ttt agc ctc gtg tcc ggc tgg ggc cag ctg ctc gac	981
Ala Phe Val Arg Phe Ser Leu Val Ser Gly Trp Gly Gln Leu Leu Asp	
275 280 285	
cgg ggc gct acc gct ctc gag ctg atg gtg ctc aac gtc ccc cgg ctg	1029
Arg Gly Ala Thr Ala Leu Glu Leu Met Val Leu Asn Val Pro Arg Leu	
290 295 300 305	
atg acc cag gac tgc ctg cag cag tcc cgc aaa gtg ggg gac tcc ccc	1077
Met Thr Gln Asp Cys Leu Gln Gln Ser Arg Lys Val Gly Asp Ser Pro	
310 315 320	
aat atc acg gag tat atg ttt tgc gct ggc tat agc gat ggc tcc aag	1125
Asn Ile Thr Glu Tyr Met Phe Cys Ala Gly Tyr Ser Asp Gly Ser Lys	
325 330 335	
gat agc tgc aag ggg gac tcc ggc ggg ccc cat gcc acg cac tat cgc	1173
Asp Ser Cys Lys Gly Asp Ser Gly Gly Pro His Ala Thr His Tyr Arg	
340 345 350	
ggg acc tgg tac ctc acc ggg atc gtc agc tgg ggc cag ggc tgc gcc	1221
Gly Thr Trp Tyr Leu Thr Gly Ile Val Ser Trp Gly Gln Gly Cys Ala	
355 360 365	
acg gtg ggg cac ttt ggc gtc tac acg cgc gtc agc cag tac att gag	1269
Thr Val Gly His Phe Gly Val Tyr Thr Arg Val Ser Gln Tyr Ile Glu	
370 375 380 385	
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Asp Ala Glu Arg Thr Lys Leu Phe Trp Ile Ser Tyr Ser Asp Gly Asp	
35 40 45	
Gln Cys Ala Ser Ser Pro Cys Gln Asn Gly Gly Ser Cys Lys Asp Gln	
50 55 60	
Leu Gln Ser Tyr Ile Cys Phe Cys Leu Pro Ala Phe Glu Gly Arg Asn	
65 70 75 80	

Cys	Glu	Thr	His	Lys	Asp	Asp	Gln	Leu	Ile	Cys	Val	Asn	Glu	Asn	Gly	
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Pro	Thr	Val	Glu	Tyr	Pro	Cys	Gly	Lys	Ile	Pro	Ile	Leu	Glu	Lys	Arg	
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145					150					155					160	
Lys	Gly	Glu	Cys	Pro	Trp	Gln	Val	Leu	Leu	Leu	Val	Asn	Gly	Ala	Gln	
			165					170						175		
Leu	Cys	Gly	Gly	Thr	Leu	Ile	Asn	Thr	Ile	Trp	Val	Val	Ser	Ala	Ala	
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His	Cys	Phe	Asp	Lys	Ile	Lys	Asn	Trp	Arg	Asn	Leu	Ile	Ala	Val	Leu	
		195					200				205					
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225					230					235					240	
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			245					250					255			
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			260					265					270			
Leu	Ala	Phe	Val	Arg	Phe	Ser	Leu	Val	Ser	Gly	Trp	Gly	Gln	Leu	Leu	
		275					280					285				
Asp	Arg	Gly	Ala	Thr	Ala	Leu	Glu	Leu	Met	Val	Leu	Asn	Val	Pro	Arg	
	290					295					300					
Leu	Met	Thr	Gln	Asp	Cys	Leu	Gln	Gln	Ser	Arg	Lys	Val	Gly	Asp	Ser	
305					310					315					320	
Pro	Asn	Ile	Thr	Glu	Tyr	Met	Phe	Cys	Ala	Gly	Tyr	Ser	Asp	Gly	Ser	
			325						330					335		
Lys	Asp	Ser	Cys	Lys	Gly	Asp	Ser	Gly	Gly	Pro	His	Ala	Thr	His	Tyr	
			340					345					350			
Arg	Gly	Thr	Trp	Tyr	Leu	Thr	Gly	Ile	Val	Ser	Trp	Gly	Gln	Gly	Cys	
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 385 390 395 400

Leu Arg Ala Pro Phe Pro
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 <211> 1357
 <212> DNA
 <213> Artificial Sequence

<220>
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 cassette for expression of FVII in mammalian cells

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 agaggaacag tgcagctttg aggaagcccg ggagattttc aaagacgctg agcggaccaa 240
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 cggcgggacc ctcacataa ccatttgggt cgtgtccgcc gctcactgct tcgataagat 720
 taagaattgg cggaaacctc tcgctgtgct cggcgaacac gatctgtccg agcatgacgg 780
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 cgtgctctg tgccctgctg agcggacctt tagcgaacgc acgctggctt tcgtccgctt 960
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 ggtgctcaac gtcccccgcc tgatgaccca ggactgctg cagcagtcctt gcaaagtggg 1080
 ggactcccc aatatcacgg agtatatgtt ttgcgctggc tatagcgatg gctccaagga 1140
 tagctgcaag ggggactccg gcgggcccc tgccacgcac tatcgcgga cctgggtacct 1200
 caccgggac gtcagctggg gccagggtg cggcacgggt gggcactttg gcgtctacac 1260
 gcgcgtcagc cagtacattg agtggtgca gaagctcatg cggagcgaac cccggcccgg 1320
 ggtgctcctg cgggcccctt tcccttgata aaagctt 1357

<210> 5
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 <212> DNA
 <213> Artificial Sequence

<220>
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 CBProFpr174

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31

<210> 6
 <211> 31
 <212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer
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<210> 7

<211> 30

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer
CBProFpr216

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<210> 8

<211> 28

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer
CBProFpr229

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ggagtccccg gttttgttgg actgctgc

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<210> 9

<211> 21

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer
CBProFpr221

<400> 9

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<210> 10

<211> 28

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Primer
CBProFpr228

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gcagcagtcc aacaaaaccg gggactcc

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<210> 11
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<212> DNA
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CBProFpr226

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<210> 12
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<212> PRT
<213> Artificial Sequence

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<223> Description of Artificial Sequence: synthetic peptide tag

<400> 12
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1 5

<210> 13
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic peptide tag

<400> 13
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1 5

<210> 14
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
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1 5 10

<210> 15
<211> 14

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: synthetic peptide tag

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1 5 10

<210> 16
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<212> PRT
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<210> 17
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<213> Artificial Sequence

<220>
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<400> 17
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<210> 18
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<220>
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<210> 19
<211> 9
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<213> Artificial Sequence

<220>
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